

Application No.: 10/728358

Docket No.: LP 4820 US NA

**REMARKS**

In the outstanding Office Action, the Restriction to prosecute the invention of Group II, claims 9-20 was indicated; claim 9 was objected to because of a formality; claims 9-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 3,940,917 (Strachan) in view of U.S. Patent No. 5,896,634 (Brodowski et al.); claims 9-10 and 12-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Jampanes Patent No. 4,733,754 (Nakatomi et al.); claims 9-16 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of U.S. Patent No. 3,719,664 (Hayes et al.); claims 13-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Brodowski et al., as applied to claims 9-20, and further in view of U.S. Patent No. 3,867,242 (Miller); claims 13-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Nakatomi et al., as applied to claims 9-20, and further in view of Miller; and claims 13-16 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Hayes et al., as applied to claims 9-16, and further in view of Miller.

***Restriction Requirement***

Client affirms the election of Group II, claims 9-20 for examination in the present application. Claims 1-8 are withdrawn without prejudice.

***Claim Objections***

Claim 9 was objected to due to a formality. Claim 9 has been amended by the present amendment to overcome the outstanding objection. Applicant respectfully submits that the amendment to claim 9 raises no question of new matter and requests that the outstanding objection be withdrawn.

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***Rejections under 35 U.S.C. Section 103***

Claims 9-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Brodowski et al. Applicant respectfully traverses the rejection.

Strachan discloses a composite yarn composed of un-crimped elastic yarn and at least five relatively inelastic continuous filaments entangled about the elastic yarn to provide protection and desirable textile properties.<sup>1</sup> In particular, Strachan discloses an "entangled yarn" in which hard fiber filaments 20 are shown entangled with other hard fiber filaments *about elastic yarn 1*, which in this case is a single yarn of coalesced spandex.<sup>2</sup> Applicant respectfully submits that the present application indicates such a yarn as "background art" and illustrates such a yarn in FIG. 1F of the application.

However, Strachan nowhere discloses, as recited in claim 9:

*aligning at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, adjacent and substantially parallel to said stretched strand to form an aligned yarn; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.*

That is, in contrast to Strachan, the composite yarn of the present invention *aligns* "at least one hard yarn" and "stretched strand" in an arrangement where the yarns are "adjacent and substantially parallel" to one another, as recited in claim 9. More specifically, FIG. 3A and FIG 3B of the present application clearly shows individual filaments of hard yarns 27 as "adjacent and substantially parallel to said stretched strand" (i.e., elastomeric fiber 53), of the size covered composite yarn 1, which has a structure that is unique as compared to the background art of Strachan and others.<sup>3</sup>

<sup>1</sup> Strachan at ABSTRACT.

<sup>2</sup> Strachan at FIG. 3, column 4, lines 15-18.

<sup>3</sup> Application at paragraph 50, lines 4-15.

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Further, regarding claims 17-18 (19-20), each recite the limitation:

strands of bare, essentially untwisted elastomeric fibers in the weft (warp) that are *substantially parallel and adjacent to hard yarns* in the weft (warp) (emphasis added).

That is, Applicant respectfully submits that it is not predictable from Strachan (i.e., an unexpected result) that the “strands of bare, essentially untwisted elastomeric fibers” remain “substantially parallel and adjacent to hard yarns,” as recited in claims 17-20.

In fact, it is respectfully submitted that it is instead predictable that merely “entangled yarns” will end up in an entangled state “after final finishing,” as recited in claims 17-20. This is in contrast to the “composite yarn” and “elastic woven fabric” of the claims 9-16 and claims 17-20, respectively. Thus, it is respectfully submitted that Strachan does not disclose the invention of claims 9-20.

In an attempt to cure the deficiencies of Strachan, the outstanding Office Action attempts to combine Strachan with Brodowski et al. or takes Official Notice. However, as discussed below, neither Brodowski et al. nor Official Notice can overcome all of the deficiencies of Strachan.

Brodowski et al. discloses a sizing agent-free *tangled* multifilament yarn, wherein at least the majority of the filaments have a thin film consisting mainly of hard wax (emphasis added).<sup>4</sup> However, Brodowski et al. nowhere discloses, as recited in claim 9:

*aligning* at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, *adjacent and substantially parallel to said stretched strand to form an aligned yarn*; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.

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<sup>4</sup> Brodowski et al. at ABSTRACT.

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That is, in contrast to Brodowski et al., the composite yarn of the present invention *aligns* "at least one hard yarn" and "stretched strand" in an arrangement where the yarns are "adjacent and substantially parallel" to one another, as recited in claim 9. Further, regarding claims 17-18 (19-20), each recite the limitation:

strands of bare, essentially untwisted elastomeric fibers in the weft (warp) that are *substantially parallel and adjacent to hard yarns* in the weft (warp) (emphasis added).

That is, Applicant respectfully submits that it is not predictable from Brodowski et al. (i.e., an unexpected result) that the "strands of bare, essentially untwisted elastomeric fibers" remain "substantially parallel and adjacent to hard yarns," as recited in claims 17-20. Thus, it is respectfully submitted that Brodowski et al. does not overcome the deficiencies of Strachan.

With regards to taking "Official Notice," Applicant respectfully requests that specific reference documentation be identified in a next Office Action where the facts asserted to be well known are capable of instant and unquestionable demonstration and that such documentation clearly provides teachings that would overcome the deficiencies of both Strachan and Brodowski et al.

Therefore, it is respectfully submitted that neither Strachan nor Brodowski et al., whether taken individually or in combination, discloses, suggests or makes obvious the invention of claims 9-20 and that claims 9-20 patentably distinguish thereover.

Claims 9-10 and 12-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Nakatomi et al. Applicant respectfully traverses the rejection.

As discussed above, Strachan does not disclose, suggest or make obvious the invention of claims 9-20. Thus, neither does Strachan disclose the limitations of claims 9-10 and 12-20. In an attempt to cure the deficiencies of Strachan, the outstanding Office Action attempts to

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combine Strachan with Nakatomi et al. However, neither Nakatomi et al. nor Official Notice can overcome all the deficiencies of Strachan as discussed below.

Nakatomi et al. discloses a method for manufacturing a highly elastic fiber product by combining a specialty fiber strand wound with a continuous fiber strand.<sup>5</sup> However, Nakatomi et al. nowhere discloses, as recited in claim 9:

*aligning at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, adjacent and substantially parallel to said stretched strand to form an aligned yarn; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.*

That is, in contrast to Nakatomi et al., the composite yarn of the present invention *aligns* "at least one hard yarn" and "stretched strand" in an arrangement where the yarns are "adjacent and substantially parallel" to one another, as recited in claim 9. Further, regarding claims 17-18 (19-20), each recite the limitation:

*strands of bare, essentially untwisted elastomeric fibers in the weft (warp) that are substantially parallel and adjacent to hard yarns in the weft (warp) (emphasis added).*

That is, Applicant respectfully submits that it is not predictable from Nakatomi et al. (i.e., an unexpected result) that the "strands of bare, essentially untwisted elastomeric fibers" remain "substantially parallel and adjacent to hard yarns," as recited in claims 17-20. Therefore, Nakatomi et al. does not overcome the deficiencies of Strachan.

With regards to taking "Official Notice," Applicant respectfully requests that specific reference documentation be identified in a next Office Action where the facts asserted to be well known are capable of instant and unquestionable demonstration and that such documentation clearly provides teachings that would

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<sup>5</sup> Nakatomi et al. at page 3, second paragraph.

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overcome the deficiencies of both Strachan and Nakatomi et al.

Therefore, it is respectfully submitted that neither Strachan nor Nakatomi et al., whether taken individually or in combination, discloses, suggests or makes obvious the invention of claims 9-10 and 12-20 that claims 9-10 and 12-20 patentably distinguish thereover.

Claims 9-16 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Hayes et al. Applicant respectfully traverses the rejection.

As discussed above, Strachan does not disclose, suggest or make obvious the invention of claims 9-20. Thus, neither does Strachan disclose the limitations of claims 9-16. In an attempt to cure the deficiencies of Strachan, the outstanding Office Action attempts to combine Strachan with Hayes et al. However, Hayes et al. cannot overcome all the deficiencies of Strachan as discussed below.

Hayes et al. discloses starch compositions that are especially useful in sizing hydrophobic yarns.<sup>6</sup> However, Hayes et al. nowhere discloses, as recited in claim 9:

*aligning at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, adjacent and substantially parallel to said stretched strand to form an aligned yarn; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.*

That is, in contrast to Hayes et al., the composite yarn of the present invention aligns "at least one hard yarn" and "stretched strand" in an arrangement where the yarns are "adjacent and substantially parallel" to one another, as recited in claim 9.

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<sup>6</sup> Hayes et al. at column 1, lines 5-10.

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Therefore, it is respectfully submitted that neither Strachan nor Hayes et al., whether taken individually or in combination, discloses, suggests or makes obvious the invention of claims 9-16 and that claims 9-16 patentably distinguish thereover.

Claims 13-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Brodowski et al., as applied to claims 9-20, and further in view of Miller. Applicant respectfully traverses the rejection.

As discussed above, neither Strachan nor Brodowski et al. disclose, suggest or make obvious the invention of claims 9-20. In an attempt to cure the deficiencies of Strachan and Brodowski et al., the outstanding Office Action attempts to combine Strachan and Brodowski et al. with Miller. However, Miller cannot overcome all the deficiencies of Strachan and Brodowski et al., as discussed below.

Miller discloses a fabric simulating woven fabric comprising conventional warp threads disposed in the longitudinal direction and a "filling" comprising monofilaments laid transversely of the warp threads.<sup>7</sup> However, Miller nowhere discloses, as recited in claim 9:

*aligning at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, adjacent and substantially parallel to said stretched strand to form an aligned yarn; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.*

That is, in contrast to Miller, the composite yarn of the present invention *aligns* "at least one hard yarn" and "stretched strand" in an arrangement where the yarns are "adjacent and substantially parallel" to one another, as recited in claim 9.

Further, regarding claims 17-18 (19-20), each recite the limitation:

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<sup>7</sup> Miller. at ABSTRACT.

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strands of bare, essentially untwisted elastomeric fibers in the weft (warp) that are *substantially parallel and adjacent to hard yarns* in the weft (warp) (emphasis added).

That is, Applicant respectfully submits that it is not predictable from Miller (i.e., an unexpected result) that the “strands of bare, essentially untwisted elastomeric fibers” remain “substantially parallel and adjacent to hard yarns,” as recited in claims 17-20. Therefore, Miller does not overcome the deficiencies of Strachan and Brodowski et al.

Therefore, it is respectfully submitted that none of Strachan, Brodowski et al., or Miller, whether taken individually or in combination, discloses, suggests or makes obvious the invention of claims 9-20 and that claims 9-20 patentably distinguish thereover.

Claims 13-20 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Nakatomi et al., as applied to claims 9-20, and further in view of Miller. Applicant respectfully traverses the rejection.

As discussed above, Strachan and Nakatomi et al. do not disclose, suggest or make obvious the invention of claims 9-20. In an attempt to cure the deficiencies of Strachan and Nakatomi et al., the outstanding Office Action attempts to combine Strachan and Nakatomi et al. with Miller. However, Miller cannot overcome all the deficiencies of Strachan and Nakatomi et al. as discussed below.

As discussed above, Miller discloses a fabric simulating woven fabric comprising conventional warp threads disposed in the longitudinal direction and a “filling” comprising monofilaments laid transversely of the warp threads.<sup>8</sup> However, Miller nowhere discloses, as recited in claim 9:

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<sup>8</sup> Miller, at ABSTRACT.



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*aligning at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, adjacent and substantially parallel to said stretched strand to form an aligned yarn; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.*

That is, in contrast to Miller, the composite yarn of the present invention *aligns* “at least one hard yarn” and “stretched strand” in an arrangement where the yarns are “adjacent and substantially parallel” to one another, as recited in claim 9.

Further, regarding claims 17-18 (19-20), each recite the limitation:

*strands of bare, essentially untwisted elastomeric fibers in the weft (warp) that are substantially parallel and adjacent to hard yarns in the weft (warp) (emphasis added).*

That is, Applicant respectfully submits that it is not predictable from Miller (i.e., an unexpected result) that the “strands of bare, essentially untwisted elastomeric fibers” remain “substantially parallel and adjacent to hard yarns,” as recited in claims 17-20. Therefore, Miller does not overcome the deficiencies of Strachan and Nakatomi et al.

Therefore, it is respectfully submitted that none of Strachan, Nakatomi et al., or Miller, whether taken individually or in combination, discloses, suggests or makes obvious the invention of claims 13-20 and that claims 13-20 patentably distinguish thereover.

Claims 13-16 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Strachan in view of Hayes et al., as applied to claims 9-16, and further in view of Miller. Applicant respectfully traverses the rejection.

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As discussed above, Strachan and Hayes et al. do not disclose, suggest or make obvious the invention of claims 9-16. In an attempt to cure the deficiencies of Strachan and Hayes et al., the outstanding Office Action attempts to combine Strachan and Hayes et al. with Miller. However, Miller cannot overcome all the deficiencies of Strachan and Hayes et al. as discussed below.

As discussed above, Miller discloses a fabric simulating woven fabric comprising conventional warp threads disposed in the longitudinal direction and a "filling" comprising monofilaments laid transversely of the warp threads.<sup>9</sup> However, Miller nowhere discloses, as recited in claim 9:

*aligning at least one hard yarn selected from the group consisting of synthetic fibers, natural fibers and a blend of synthetic and natural fibers, adjacent and substantially parallel to said stretched strand to form an aligned yarn; applying a size material to said aligned yarn; and drying or curing the size material to form a composite yarn.*

That is, in contrast to Miller, the composite yarn of the present invention *aligns* "at least one hard yarn" and "stretched strand" in an arrangement where the yarns are "adjacent and substantially parallel" to one another, as recited in claim 9. Thus, Miller does not overcome the deficiencies of Strachan and Hayes et al.

Therefore, it is respectfully submitted that none of Strachan, Hayes et al., or Miller, whether taken individually or in combination, discloses, suggests or makes obvious the invention of claims 13-16 and that claims 13-16 patentably distinguish thereover.

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<sup>9</sup> Miller, at ABSTRACT.

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**Conclusion**

In view of the above amendments and remarks, reconsideration and allowance of the pending claims are respectfully requested. Applicants believe that the present application is in condition for allowance, and an early indication of the same is respectfully requested.

If the Examiner has any questions or requires clarification, the Examiner is invited to contact the undersigned so that this Application may continue to be expeditiously advanced. In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned is available at the telephone number noted below.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. LP 4820 (10253-115).

Dated: November 14, 2005

Respectfully submitted,

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